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DATE: June 1, 2005
TO: Amendment
Commissioner for Patents
ATTN: Examiner: Hosuk Song
Art Unit: 2135

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ATTORNEY DOCKET NO.: 990566A1

ENCLOSED ARE:

- Amendment (8 pages)
- Transmittal

APPLICANT: Sandip Sarkar

ASSIGNEE: QUALCOMM Incorporated

SERIAL NO.: 09/419,968

FILED: October 18, 1999

FOR: RANDOM NUMBER GENERATION FOR ENCRYPTING CELLULAR COMMUNICATIONS

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AMENDMENT TRANSMITTAL FORM

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Customer No.: 23696
Attorney Docket No.: 990566A1
In Re Application of: Sandip Sarkar
Serial Number: 09/419,968
Filed: October 18, 1999
Examiner: Hosuk Song
Group Art Unit: 2135

Dear Sir:

Transmitted herewith for filing is a Response to Office Action in the above identified application.

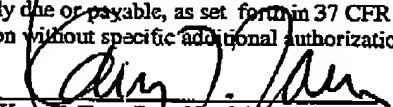
| CLAIMS | (a) Number Remaining After Amendment | (b) Highest Number Previously Paid For | (c) Extra Claims | Large Entity Fee | Fee Paid |
|---|--|---|------------------------|------------------|-----------|
| Total* | 6 | 33 | 0 | x \$50 = | \$00.00 |
| Independent** | 6 | 7 | 0 | x \$200 = | \$00.00 |
| Multiple Dependent Claim(s): <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | | | | \$360 | \$ |
| EXTENSION FEES <input type="checkbox"/> One Month <input type="checkbox"/> Two Months <input checked="" type="checkbox"/> Three Months | | | | \$120 | \$ |
| | | | | \$450 | \$ |
| | | | | \$1020 | \$1020.00 |
| TERMINAL DISCLAIMER | | | | \$130 | \$ |
| | | | | TOTAL FEE | \$1020.00 |

*If the number in column a is less than 20, enter 0 in column c.

**If the number in column a is less than 3, enter 0 in column c.

4. ☐ Fee check in the amount of \$_____ is enclosed to pay for any claim and/or extension fees.
5. ☐ Please charge Deposit Account No. 17-0026 of QUALCOMM Incorporated the amount of \$1020.00.
The Commissioner is hereby authorized to charge payment of any additional fees that may be required, or credit any overpayment to said Deposit Account No. 17-0026. A duplicate of this sheet is enclosed for fee processing.
6. ☒ The Commissioner is further hereby authorized to charge to said Deposit Account No. 17-0026, pursuant to 37 CFR 1.25(b), any fee whatsoever which may become properly due or payable, as set forth in 37 CFR 1.16 to 37 CFR 1.18 inclusive, for the entire pendency of this application without specific additional authorization.

Date: June 1, 2005

Signature: 

Karan T. Tam, Reg. No. 35,756
(858) 651-5563

QUALCOMM Incorporated
Attn: Patent Department
5775 Morehouse Drive
San Diego, California 92121-1714
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(TRANSAMD.VER1.13-04/30/04)

Attorney Docket No. 990566A1

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:
Sandip Sarkar

Serial No. 09/419,968

Examiner: Hosuk Song

Filed: October 18, 1999

For: RANDOM NUMBER
GENERATION FOR
ENCRYPTING CELLULAR
COMMUNICATIONS

) Group No. 2135

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Commissioner for Patents
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Dear Sir:

In response to the Office Action dated December 1, 2004, please amend the above-identified application as indicated below. Applicant hereby petitions a three (3) month Extension of Time.

CERTIFICATE OF MAILING/TRANSMISSION (37 CFR 1.8(a))

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(type or print name)Date: June 1, 2005**FACSIMILE**

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Depositor's Name: Tran Le
(type or print name)Signature: 

BEST AVAILABLE COPY Attorney Docket No. 990566A1**AMENDMENT TO THE CLAIMS:**

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-5 (Cancelled)

6. (Previously Presented) An encryption system, comprising:
 - a random number selector subsystem for generating random numbers from adjusted data bits of a Receive Automatic Gain Control circuit, wherein said adjusted data bits are generated from said Automatic Gain Control circuit operating on a received signal; and
 - an encryptor for encrypting a signal using said random numbers.
7. (Previously Presented) An encryption system, comprising:
 - a random number selector subsystem for generating random numbers from instantaneous variations of the DC offset component of the input signal, wherein said variations are generated from said DC Offset Correction Loop circuit operating on a received signal; and
 - an encryptor for encrypting a signal using said random numbers.
8. (Previously Presented) An encryption system, comprising:
 - a random number selector subsystem for generating random numbers from variations in the receive signal propagation delay over time, wherein a CDMA Time Tracking Loop circuit is operating to track said variations in the receive signal propagation delay over time; and
 - an encryptor for encrypting a signal using said random numbers.
9. (Cancelled)

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10. (Previously Presented) An apparatus for generating random data bits in wireless communications device, comprising:

means for processing a received signal from a Receive Automatic Gain Control Circuit;

means for adjusting data bits generated from said automatic gain control circuit; and

means for extracting said random data bits from said automatic gain control circuit.

11. (Previously Presented) An apparatus for generating random data bits in wireless communications device, comprising:

means for processing a received signal from a DC Offset Correction Loop;

means for generating random data bits from said DC Offset Correction Loop; and

means for extracting said random data bits from said DC Offset Correction Loop.

12. (Previously Presented) An apparatus for generating random data bits in wireless communications device, comprising:

means for processing a received signal from a Time Tracking Loop;

means for generating random data bits from said Time Tracking Loop; and

means for extracting said random data bits from said Time Tracking Loop.

Claims 13 – 33 (Cancelled)

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REMARKS

In the aforementioned Office Action, the Examiner rejected pending claims 6-8 and 10-12. By this response, claims 6-8 and 10-12 have not been amended and are resubmitted for the Examiner's reconsideration for reasons as stated below.

Rejection under 35 U.S.C. § 103

Claim 6 was rejected under 35 U.S.C. § 103(a) as unpatentable over *Hill* (U.S. Patent No. 4,658,436) in view of *Smeets* (U.S. Patent No. 6,339,645). In the rejection, the Examiner basically alleged that combining the receiver circuit in Fig. 3 of *Hill* with the encrypting feature of *Smeets* would have arrived at the system as claimed in Applicant's claim 6.

First, Applicant respectfully submits that the references of *Hill* and *Smeets* were grossly misconstrued and further inappropriately combined in the rejection of claim 6.

In the receiver circuit of *Hill*, there is clearly no need to encrypt any signal. Messages coming out of the receiver as shown in Fig. 3 of *Hill* is intended to be directly accessible by the user. Encrypting of any signal within or coming out of the receiver of *Hill* would serve no purpose. In fact, such encryption would render the receiver circuit of *Hill* malfunctioning. The reason is because the encrypted message would be unintelligible to the user. As such, the suggested modification would defeat the purpose of *Hill*. Based on *Hill* and *Smeets*, a person of ordinary skill in the art would not have come up with a combination which defeats the purpose of *Hill*.

Conjectural modification of a prior art disclosure which is unwarranted by such disclosure is improper. *Carl Schenck, A.G. v. Norton Corp.*, 713 F.2d 782, 218 USPQ 698, 702

Attorney Docket No. 990566A1

(Fed. Cir. 1983). This is especially true if the suggested modification results in a malfunctional combination.

In the aforementioned Office Action, claim 7 was also rejected under 35 U.S.C. § 103(a) as being unpatentable over *Walker* (U.S. Patent No. 6,154,158) in view of *Smeets* (U.S. Patent No. 6,339,645). Furthermore, claim 8 was also rejected under 35 U.S.C. § 103(a) as being unpatentable over *Schneider* (U.S. Patent No. 5,781,541) in view of *Smeets* (U.S. Patent No. 6,339,645).

The rejections of claims 7 and 8 will be collectively addressed below.

In addition to the unwarranted modifications as stated above, with respect claim 7, contrary to the Examiner's assertion, nowhere can there be found in *Walker* of any mention of "random number selector subsystem for generating random numbers (page 3, paragraph 3, lines 3-4 of the Office Action)" and its equivalent, much less the "random number selector" generating random numbers from the "DC offset correction loop circuit" as also claimed in claim 7.

Likewise, with respect to claim 8, along the same line of reasoning, nowhere can there be found in *Schneider* of any "random number selector subsystem for generating random numbers (paragraph 4, lines 3-4 of the Office Action)" or anything equivalent, much less the "random number selector" generating random numbers from the "CDMA time tracking loop circuit" as claimed in claims 8.

Thus, combing the encrypting feature of *Smeets* with *Walker* and *Schneider*, if possible at all, do not meet Applicant's claims 6 and 7, respectively. With claim limitation not found in the prior art, a *prima facie* case of obviousness cannot be established. MPEP § 2143.03.

Respectfully, Applicant submits that the suggested combinations could only have come from hindsight.

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For the reasons stated above, withdrawal of the rejections on claims 6-8 under 35 U.S.C. § 103(a) is believed to be in order and is respectfully requested.

Rejection under 35 U.S.C. § 102

Claim 10 was rejected under 35 U.S.C. § 102(e) as being anticipated by *Hill*. In the rejection, the Examiner basically alleged that all features as claimed in claim 10 are found in the receiver circuit shown in Fig. 3 of *Hill*.

Contrary to the Examiner's allegation, among other things, nowhere can there be found in *Hill* of any mention of "means for extracting said random data bits from said automatic gain control unit" which is specifically claimed in Applicant's claim 10. That is, in Fig. 3 of *Hill*, there is no extraction of any "random data bits" from the optional AGC circuit 33. Rather, coming out of the AGC circuit 33 is a received signal from the antenna 31 and tuner 32 faithfully sent to the demodulator 34 for demodulation (column 9, lines 4-8 of *Hill*). The PN (Pseudo-Random) generator 37 generates PN code on its own, instead of deriving any "random data bits from said automatic gain control unit" as claimed in Applicant's claim 10. In fact, the PN code generated from the PN generator 37 is the exact replica of the PN code generated by the PN code generator 11 of the transmitter circuit shown in Fig. 1 (column 9, lines 23-26 of *Hill*). In short, the PN code in *Hill* is prearranged which is far from truly random and has no linkage whatsoever of deriving any random bits of the AGC circuit 33 by the PN code generator 37, in a manner as claimed in claim 10.

In order to constitute an anticipation the reference must describe or disclose all the limitations of the claims. *In re Lange*, 644 F.2d 856, 209 USPQ 288, 293 (CCPA 1981).

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For at least the features lacking as explained above, claim 10 is submitted to be not anticipated by *Hill*.

Claim 12 was also rejected under 35 U.S.C. § 102(b) as being anticipated by *Schneider*. In addition, claim 11 was rejected under 35 U.S.C. § 102(e) as being anticipated by *Walker*.

With respect to claim 12, again, in contrary with the Examiner's assertion, nowhere in *Schneider* can there be found of any "means for extracting said random data bits from said time tracking loop" as claimed by Applicant. As mentioned above, *Schneider* is silent in regard to random number generation. The paragraphs quoted from *Schneider* (column 5, lines 17-37; column 8, lines 31-55; and column 11, lines 28-36) concern with the time-diversity delays used in CDMA systems to distinguish different user channels and are unrelated to random number generation and further with no bearing on any random number extraction, as claimed by Applicant.

Likewise, in regard to claim 11, in the rejection, the Examiner quoted selected paragraphs (column 6, lines 44-65; and column 13, lines 23-31) from *Walker* which merely describe a DC offset correction circuit 222. Nowhere can there be found in *Walker* of any "means for generating random data bits from said DC offset correction loop," much less "means for extracting said random data bits from said DC offset correction loop" as claimed in claim 11.

With the aforementioned features lacking in *Schneider* and *Walker*, rejections on claims 12 and 11 under 35 U.S.C. § 102(b) and § 102(e), respectively, cannot be sustained and should be withdrawn.

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CONCLUSION

In light of the above remarks, Applicants respectfully submit that claims 6-8 and 10-12 are distinguishably patentable over the prior art. The application is believed to be in condition for allowance. Reconsideration and an early allowance are respectfully requested.

Respectfully submitted,

Date: June 1, 2005By: 

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